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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,827	12/19/2001	Hiroshi Tojo		8451

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EXAMINER

PESIN, BORIS M

ART UNIT PAPER NUMBER

2174

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,827

Applicant(s)

TOJO ET AL.

Examiner

Boris Pesin

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/07/2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Handwritten signature or mark.

DETAILED ACTION

Response to Amendment

This communication is responsive to Amendment A, filed 2/07/2005.

Claims 1-31 are pending in this application. Claims 1, 11, 16, 25, 30 and 31 are independent claims. In the Amendment A, Claims 16 was amended. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-12, 14-17, 19-26, and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Lavallee et al. (US 5737552).

In regards to claim 1, Lavallee teaches an image processing apparatus comprising: a storage device that stores (Figure 6, Element 612) scene information including, at least, data for a representative frame of a scene (Figure 2), data for an interval of the scene and data for a hierarchical level of the scene of each of a plurality of scenes included in a moving picture that is subject to a playback (Figure 1); a display device that reads images of the representative frames of the plurality of scenes from the storage device and chronologically displays the images based on an external

designation of the hierarchical level (Figure 5, Element 502); and a playback device that plays back the scene corresponding to the images of the representative frames displayed by the display device based on an external playback instruction (Figure 5, Element 504).

In regards to claim 2, Lavallee teaches an image processing apparatus according to claim 1, wherein the display device chronologically displays a specified number of the images of the representative frames of the plurality of scenes concurrently (Figure 3).

In regards to claim 3, Lavallee teaches an image processing apparatus according to claim 1, wherein the display device refers to the scene information in the storage device when a hierarchical level is externally designated (Figure 1), and chronologically displays images of the representative frames of the scenes having the hierarchical level designated and above (Figure 1).

In regards to claim 5, Lavallee teaches an image processing apparatus according to claim 1, wherein the display device displays the images of the representative frames with data indicative of the hierarchical level corresponding to the representative frames being added to the images of the representative frames (i.e. "If, however, the user requests additional program information while viewing a scene having corresponding additional program information, the additional program information will then be conveyed to the user, as indicated by a block 426. Thus, referring back to FIG. 1, an example of this situation would be where a user is viewing scene 2, requests additional

Art Unit: 2174

program information, and is then conveyed program information corresponding to scene 2.1." Column 10, line 24).

In regards to claim 6, Lavallee teaches an image processing apparatus according to claim 1, wherein the display device displays the scene played back by the playback device together with the images of the representative frames of the scenes, and displays data for discriminating representative frames corresponding to the scene being currently played back from the other representative frames (i.e. "If, however, the user requests additional program information while viewing a scene having corresponding additional program information, the additional program information will then be conveyed to the user, as indicated by a block 426. Thus, referring back to FIG. 1, an example of this situation would be where a user is viewing scene 2, requests additional program information, and is then conveyed program information corresponding to scene 2.1." Column 10, line 24).

In regards to claim 7, Lavallee teaches an image processing apparatus according to claim 1, wherein the display device changes a display condition in the images of the representative frames of the scenes that are chronologically displayed based on an external instruction (i.e. "If, however, the user requests additional program information while viewing a scene having corresponding additional program information, the additional program information will then be conveyed to the user, as indicated by a block 426. Thus, referring back to FIG. 1, an example of this situation would be where a user is viewing scene 2, requests additional program information, and is then conveyed program information corresponding to scene 2.1." Column 10, line 24).

In regards to claim 8, Lavaltee teaches an image processing apparatus according to claim 6, wherein the display device changes a display condition in the images of the representative frames of the scenes that are chronologically displayed, synchronizing with the images being played back by the playback device (i.e. "If, however, the user requests additional program information while viewing a scene having corresponding additional program information, the additional program information will then be conveyed to the user, as indicated by a block 426. Thus, referring back to FIG. 1, an example of this situation would be where a user is viewing scene 2, requests additional program information, and is then conveyed program information corresponding to scene 2.1." Column 10, line 24).

In regards to claim 9, Lavaltee teaches an image processing apparatus according to claim 6, wherein the display device changes a display condition and selects whether change of the display condition is synchronized with the images being played back by the playback device, based on an external instruction (i.e. "If, however, the user requests additional program information while viewing a scene having corresponding additional program information, the additional program information will then be conveyed to the user, as indicated by a block 426. Thus, referring back to FIG. 1, an example of this situation would be where a user is viewing scene 2, requests additional program information, and is then conveyed program information corresponding to scene 2.1." Column 10, line 24).

In regards to claim 10, Lavaltee teaches an image processing apparatus according to claim 1, wherein the playback device plays back one of the scenes

Art Unit: 2174

corresponding to one of the images of the representative frames of the scenes, which is externally designated among the images of the representative frames of the scenes displayed by the display device (Figure 1).

In regards to claim 11, Lavallee teaches an image processing apparatus comprising: a storage device that stores (Figure 6, Element 612) scene information including, at least, data for a representative frame of a scene (Figure 2) and data for a hierarchical level of the scene of each of a plurality of scenes included in a moving picture that is subject to a playback (Figure 1); and a display device that reads images of the representative frames of the plurality of scenes from the storage device and chronologically displays the images based on an external designation of the hierarchical level (Figure 5, Element 502).

Claim 12 is in the same context as claim 3; therefore it is rejected under similar rationale.

Claim 14 is in the same context as claim 5; therefore it is rejected under similar rationale.

Claim 15 is in the same context as claim 7; therefore it is rejected under similar rationale.

In regards to claim 16, Lavallee teaches an image processing method comprising: storing scene information including, at least, data for representative frame of a scene, data for an interval of the scene and data for a hierarchical level of each of a plurality of scenes included in a moving picture that is subject to a playback (Figure 1); receiving an external designation of a hierarchical level (Figure 3); chronologically

Art Unit: 2174

displaying images of the representative frames of the scenes stored in the storing step, based on an external designation of the hierarchical level (i.e. "If, however, the user requests additional program information while viewing a scene having corresponding additional program information, the additional program information will then be conveyed to the user, as indicated by a block 426. Thus, referring back to FIG. 1, an example of this situation would be where a user is viewing scene 2, requests additional program information, and is then conveyed program information corresponding to scene 2.1." Column 10, line 24); and playing back the scene corresponding to the images of the representative frames displayed by the display device based on the external playback instruction (i.e. "If, however, the user requests additional program information while viewing a scene having corresponding additional program information, the additional program information will then be conveyed to the user, as indicated by a block 426. Thus, referring back to FIG. 1, an example of this situation would be where a user is viewing scene 2, requests additional program information, and is then conveyed program information corresponding to scene 2.1." Column 10, line 24).

In regards to claim 17, Lavalley teaches an image processing apparatus according to claim 16, wherein the display step chronologically displays a specified number of the images of the representative frames of the plurality of scenes concurrently (Figure 3).

Claim 19 is in the same context as claim 5; therefore it is rejected under similar rationale.

Claim 20 is in the same context as claim 6; therefore it is rejected under similar rationale.

Claim 21 is in the same context as claim 7; therefore it is rejected under similar rationale.

Claim 22 is in the same context as claim 8; therefore it is rejected under similar rationale.

Claim 23 is in the same context as claim 9; therefore it is rejected under similar rationale.

Claim 24 is in the same context as claim 10; therefore it is rejected under similar rationale.

Claim 25 is in the same context as claim 11; therefore it is rejected under similar rationale.

Claim 26 is in the same context as claim 12; therefore it is rejected under similar rationale.

Claim 28 is in the same context as claim 14; therefore it is rejected under similar rationale.

Claim 29 is in the same context as claim 15; therefore it is rejected under similar rationale.

Claim 30 is in the same context as claim 1; therefore it is rejected under similar rationale.

Claim 31 is in the same context as claim 11; therefore it is rejected under similar rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4, 13, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lavalley et al. (US 5737552) in view of Acharya et al. (US 6348929).

In regards to claim 4, Lavalley teaches all the limitations of claim 1. Lavalley does not teach an image processing apparatus wherein the images of the representative frames included reduced images. Acharya teaches, "Essentially, captured images are compressed by an image compression circuit 732 so that they can be efficiently stored in an image memory unit 734, which may be a ROM, RAM or other storage device such as a fixed disk." Column 13, Line 36). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lavalley with the

Art Unit: 2174

teachings of Acharya and include a method to compress the images with the motivation to provide the user with more space on the memory.

Claim 13 is in the same context as claim 4; therefore it is rejected under similar rationale.

Claim 18 is in the same context as claim 4; therefore it is rejected under similar rationale.

Claim 27 is in the same context as claim 4; therefore it is rejected under similar rationale.

Response to Arguments

Applicant's arguments filed 2/07/2005 have been fully considered but they are not persuasive.

The Applicant argues:

a. Lavalée does not show a representative frame of a scene of a moving picture, for which data is stored and a corresponding image is read and displayed by a display device based on an external designation of a hierarchical level, and a playback device plays back the scene corresponding to the images of the representative frames displayed by the display device.

In regards to argument (a), the Examiner respectfully disagrees. All of the frames of a scene can be interpreted to be a representative of the scene because they correspond to the scene. Furthermore there is clearly a hierarchical level to scenes and

Art Unit: 2174

frames in Lavallee (See Figure 1). And these scenes and frames are played back to the user based on external playback instructions (See Abstract).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2174

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BP

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